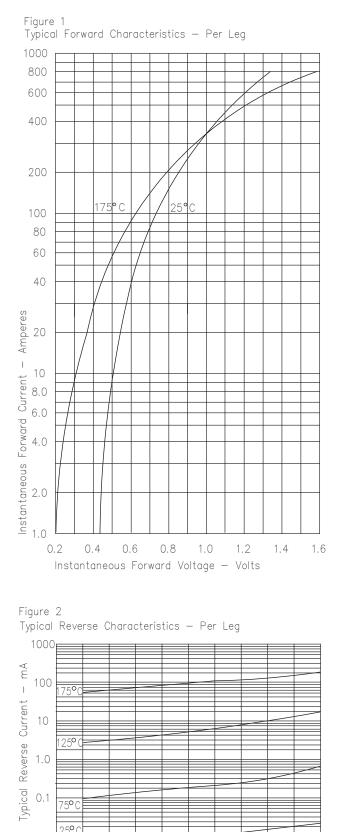
Schottky Powe CPT12035 — (	rMod CPT12050
A R G H Baseplate A=Common Anode	Dim.         Inches         Millimeters           Min.         Max.         Min.         Max.         Notes           A         3.630          92.20           B 0.700         0.800         17.78         20.32           C         0.630          16.00           E 0.120         0.130         3.05         3.30           F 0.490         0.510         12.45         12.95           G         1.375         BSC         34.92         BSC
Baseplate Common Cathode Common Cathode Common Cathode D=Doubler Notes: Baseplate: Nickel plated copper	H 0.010 0.25 N 1/4-2 Q 0.275 0.290 6.99 7.37 Dia. R 3.150 BSC 80.01 BSC U 0.600 15.24 V 0.312 0.340 7.92 8.64 W 0.180 0.195 4.57 4.95 Dia.
Microsemi Industry Working Peak Repetitive Peak Catalog Number Part Number Reverse Voltage Reverse Voltage CPT12035* MBR12035CT 35V 35V CPT12040* MBR12040CT 40V 40V CPT12045* MBR12045CT 45V 45V CPT12050* 50V 50V *Add Suffix A for Common Anode, D for Doubler	<ul> <li>Schottky Barrier Rectifier</li> <li>Guard Ring Protection</li> <li>120 Amperes/35 to 50 Volts</li> <li>175°C Junction Temperature</li> <li>Reverse Energy Tested</li> <li>ROHS Compliant</li> </ul>
Electrical Characteris	tics
Average forward currentper pkgI F(AV) 120 AmpsAverage forward currentper legI F(AV) 60 AmpsMaximum surge currentper legI FSM 1000 AmpsMaximum repetitive reverse current per legIR(OV) 2 AmpsMax peak forward voltageper legV FM .63 VoltsMax peak forward voltageper legV FM .80 VoltsMax peak reverse currentper legI RM 40 mAMax peak reverse currentper legI RM 3 mATypical junction capacitance per legC J 2700 pF*Pulse test: Pulse width 300 usec, Du	<sup>T</sup> C = 140°C ,Square wave, RθJC = 0.85°C/W 8.3ms, half sine, <sup>T</sup> J = 175°C f = 1 KHZ, 25° C, 1μsec square wave <sup>I</sup> FM = 120A: <sup>T</sup> J = 175°C <sup>I</sup> FM = 120A: <sup>T</sup> J = 25°C* VRRM,TJ = 125°C* <sup>V</sup> RRM,TJ = 25°C <sup>V</sup> R = 5.0V,TJ = 25°C
Thermal and Mechanical Cha	racteristics
Storage temp rangeT STGOperation junction temp rangeT JMax thermal resistance per legR0 JCMax thermal resistance per pkgR0 JCTypical thermal resistance (greased)R0 CSTerminal TorqueMounting Base Torque (outside holes)Mounting Base Torque (center hole)center bolt must be torqued firstWeightVeight	-55°C to 175°C -55°C to 175°C 0.85°C/W Junction to case 0.43°C/W Junction to case 0.08°C/W Case to sink 35-40 inch pounds 30-40 inch pounds 8-10 inch pounds 2.8 ounces (75 grams) typical



CPT12035



Ч 2000 Ι Junction Capacitance 1000 

Typical Junction Capacitance - Per Leg

1.0

5.0

10

50

100

0.5

Figure 3

10000

6000

4000

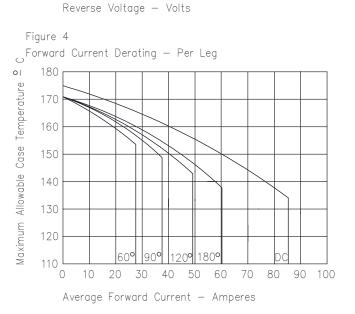
600

400

200

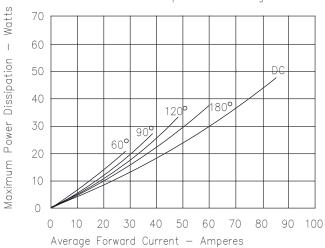
100

0.1



CPT12050

Figure 5 Maximum Forward Power Dissipation - Per Leg





10

Reverse Voltage - Volts

20

30

40

50

.01

0

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